

Purpose

The purpose of this tool is threefold:

- Convey a common understanding of the basis for documenting work processes by defining the five levels of detail for capturing work process
- Provide instructions for documenting work processes by indicating appropriate symbols and indicating ideas for modification to suit specific client needs
- Provide guidelines for identifying work process recommendations

Work Process - Levels of Detail

Project Teams identify and decompose operational and business processes to meet multiple objectives, including the following:

- Gather and document existing core business processes
- Understand the details and breakdown of the core business functions through processes decomposition
- Identify issues and concerns with the core business functions and existing processes
- Allow the process owners to redesign, modify and adjust the existing processes based on their customer's emerging requirements and internal (e.g., cost) drivers
- Allow the process owners to develop the controls and business process improvement steps to continuously improve business operations and make adjustments as required

We define work process at five levels of detail:

- Core business work process
- Key function
- Process
- Procedure
- Step

Defining and communicating which level of detail will be documented ensures that all Project Team members document work processes consistently. The scope of the project will determine whether Team members will document at the procedure or process level. In some cases, issues may become apparent at a higher level of detail, which may reduce the need to continue documenting down to the originally agreed-upon level of detail. If this is the case, the decision must be approved by the Project Team Management. The levels of detail for work processes are defined as follows:

Level 1 – Core Business Work Process

A core business work process is a collection of activities that take input, act upon the input, and create output that is valuable to the organization's internal or external customers. Core business work processes are fundamental to the organization at the enterprise level and typically cross traditional organization boundaries (e.g., functional, departmental). An organization is typically composed of 10 to 20 core business work processes that serve external and internal customers. The following are examples of some core business work processes:

- Depot Maintenance

- Supply Chain
- Material Management
- Distribution
- Institutional services (such as; HR, Finance, Budgeting, and Acquisition)

Level 2 – Key Function

A key function is the first level decomposition of a core business work process.

- There are typically 3 to 7 key functions to a core business work process.
- Each key function includes activities that contribute to completing the core business work process.
- All key functions contribute to a distinct purpose and may be described with a single verb that captures the meaning of the entire key function at a high level.

For example, Depot Maintenance (a core business work process in the previous example) includes the following key functions:

- Plan for production
- Obtain resources
- Complete repairs

Level 3 – Process

A process is the first level decomposition of a particular key function of a core business work process. A process:

- Is expressed with a single verb
- Includes a set of activities that accomplish a single purpose, contributing to the completion of the key function
- Either updates information or provides information, products, or services to internal or external customers
- May span breaks in time
- May involve multiple skill groups or people

For example, Obtain Resources (a key function in the previous example) includes the following processes:

- Obtain Materials
- Schedule Personnel

A proper decomposition of key functions into processes can yield, in any size company, a single layer of processes. However, in very large organizations or for very complex businesses, this single layer approach may yield hundreds of processes, may make work process diagrams too difficult to understand, and may not ultimately be required to identify the significant recommendations. A Project Team may choose to summarize processes to a level of detail between key function and process to reduce the number of processes for visual impact or to assist client personnel during the Transform Session with decomposing a complex process.

Level 4 – Procedure

A procedure is the first level decomposition of processes.

- A procedure includes activities that complete a single deliverable required to meet the process objective.
- A process has one or more procedures that describe its activities.
- Simple processes may be described by only one procedure, while complex processes may require 10 or more procedures for an accurate description.

Procedures generally start or finish when one of the following events occurs:

- The objective or result changes.
- Work is handed off to someone else (an entity), to a file (an information store), or to technology (an information store or an automated process).
- There is a break in the contiguous time it takes to complete the activity (a pick-up or put-down).

For example, Obtain Materials (a process in the previous example) may include the following procedures:

- Complete a Requisition
- Order Materials
- Receive Materials
- Update Physical Inventory

Level 5 – Step

A step is a single activity that is performed to complete a specific procedure.

- Steps are performed by a single person and employ a single form of technology.
- Each step must occur in the same contiguous time period.
- Individual steps do not necessarily complete a deliverable that is meaningful to the organization.
- All appropriate steps must be completed in a procedure to produce a meaningful deliverable.

For example, Order Materials (a procedure in the previous example) may include the following Steps:

- Receive the requisition from the Resource Planner
- Create a Purchase Order using the system
- Forward the Purchase Order to the supplier

During strategy projects, Project Teams should diagram the process at the level that exposes the issues. The Project Team should avoid interviewing, documenting, and identifying improvements at the step level. This level of detail will focus the process owners and the Project Team on improving tasks at a level of detail too low to arrive at high-impact ideas. Additionally, ideas generated at the process and procedure level will normally eliminate many of the Step problems.

Issues at the Step level of detail that are not addressed through process and procedure changes during a strategy project are better addressed during implementation. During implementation, the Project Team completes micro-redesign of each procedure to ensure that the procedures support the vision established during the strategy project.

The following are insurance examples of work process at the five levels of detail. Bold-faced words or phrases are reflected in the next level of detail:

Example #1

Core Business Work Process

Military Human Resource Management, Civilian Human Resource Management, Military Health System Management

Key Functions

Recruiting, Initial Entry, Training, **Transfers**, Compensation, Benefits, Separation, and Retirement

Processes

Identify Open Needs, Identify Candidates for Transfer, **Screen Candidates**, Nominate Candidates, and Obtain approved assignments, Issue PCS Orders

Procedures

Identify required skills, training and experience
Identify candidates meeting assignment criteria
Review candidate personnel records
Select nominee recommended for assignment
Submit nominee for approval

Steps

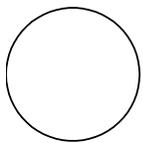
- Determine which candidates have the required grade and MOS.
- Determine which candidates attended the required schools and training
- Determine which candidates have had the prerequisite assignments
- Determine which candidates meet the deployment criteria
- Identify which candidates meet the assignment window
- Determine which candidates meet the time-on-station requirements
- Determine which candidates have the required security clearance

Work Process Documentation Conventions

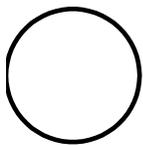
By following DoD's standard Work Process Documentation Conventions ([IDEF](#)), the Project Team consistently documents the client's core business work process. Because all work does not decompose to five levels of detail, the analytical thinker may become frustrated with this top-down organizational approach. If it isn't clear at which level of detail the process should be documented, review the definitions and choose the one that is most appropriate.

Symbols

Use the following symbols in work process documentation: Please refer to [IDEF](#) for further details on process modeling and methods.



= Process



= Automated Process



= Information Repository



= External Entity



= Information Flow



= Wait Time

Labeling

- **Process and Automated Process** – Describe each process and automated process using action *verbs*. Typical verbs include:
 - *Discuss* the marketing approach
 - *Prepare* the proposal packet
 - *Strategize* on presentation issues

Each Process and Automated Process receives only *one* verb (i.e., only one action). Annotate the process with the position responsible for the process as well as any time, frequency, or transaction volume information (e.g., 2 to 4 hours required, twice a week).

- **Information Repository** – Label information repositories, whether physical (e.g., Proposal File) or automated (e.g., Lotus System) consistently throughout the diagram. Automated information repositories should always include *system* in their label (e.g., Account Management System).
- **External Entity** – Indicate external entities such as customer, supplier, or client department or functional area not included in the engagement. External entities should also be labeled consistently throughout the diagram.
- **Information Flow** – Label the information flow with a description of the information, such as:
 - Proposal documentation
 - Client background information
 - Quote
- **Wait Time** – Indicate “white space” waiting time in minutes (for automated processes), hours, days, or weeks.

Note-taking Helpful Hints

- Follow the standard note-taking format:
 - Date and number each page.
 - Note the names of the people in the interview, including yourself.
 - Leave a lot of white space on the page.
 - Use a pencil and eraser.
 - Create a left margin on the page and use the margin to jot down unanswered questions, follow-up probes, and ideas.
- Listen to the interviewee describe the activity or steps performed to execute the process:
 - Discuss the specific steps that the person performs.
 - Annotate the significant steps as bullet points under the process circle. Start each bullet point with a verb.
 - Name the procedure by writing the action verb phrase that describes the procedure inside the circle.
 - Note the title of the person responsible for completing the process circle.
 - Draw each external entity, information repository, or subsequent process circle around the original process circle.
 - Draw information flow arrows to each external entity, information repository, or process to indicate the flow of information. Arrows pointing in to the circle indicate information used or required by the process. Arrows pointing away from the circle indicate information passed on to others or information that is filed.
 - Write on the arrow the name of the information that moves in or out of the process.
 - Indicate decision points by showing different paths on the work process diagram.
 - Draw the diagram sequentially across or down the page if the interviewee performs the procedures sequentially. Repeat external entities and information repositories to maintain the flow of information in time sequence.
- Walk through the work process diagram with the interviewee to ensure that the picture is complete and accurate.
- After completing the work process interview, review the diagram against the following checklist to ensure that the core business work process has been consistently documented to the procedure level:
 - The flow starts and ends with an external entity or an information repository.
 - Each process starts with *one verb*.
 - Each information flow is labeled with a word or phrase that describes the information.
 - There are no “black holes,” that is, every circle has at least one input and output.
 - Work process is annotated with the volume of work, frequency of work, responsibility, number of handoffs, and reasons for delays.

Identifying Work Process Recommendations

After most or all of the work process interviews that cover a specific process are completed, review the work process. It may be necessary to clean up the work process diagrams to see the process in its entirety. Evaluate the current process and develop the recommended process, beginning with the following questions:

- Why is this process performed?
- How is this process performed?
- What barriers, constraints, and bottlenecks exist when performing this process?
- What value does this process provide to the customer?
- How many people are involved in performing this process?
- Are all of these people required? Is any special expertise required? Can an individual have the knowledge to identify when expert skills are required?
- Are any tools available to help simplify the process?
- Are these tools available to all people involved in this process?
- What information is required to complete this process? Is it easily accessible? Is it correct? What are the consequences of inaccessible and inaccurate information?

The general issues that should be identified from this review include the following:

- Processes that contribute to customer issues
- Significant elapsed time that has the greatest impact on the customer and on lost productivity
- Involvement of significant numbers of people and opportunities to decrease staffing or leverage lower-skilled staff levels or automation
- Data required to conduct work effectively
- Limitations of the current technology and a technology wish list